WHAT IS CLAIMED IS:

1. An isolated and purified nucleic acid encoding a human negevin (NGVN) polypeptide.

2. The nucleic acid of claim 1, wherein said polypeptide comprises the sequence of SEQ ID NO:2.

3. The nucleic acid of claim 2, wherein the nucleic acid comprises the sequence of SEQ ID NO:1 or SEQ ID NO:3.

4. The nucleic acid of claim 1, wherein the nucleic acid comprises the sequence of SEQ ID NO:1, except for one or more of the changes selected from the group consisting of $T_{224}\rightarrow G$, $C_{814}\rightarrow T$, $C_{823}\rightarrow T$, $A_{387}\rightarrow G$, $A_{1413}\rightarrow C$, A_{940}del and 1206insA.

5. The nucleic acid of claim 1, further comprising a promoter.

6. The nucleic acid of claim 5, wherein said promoter is selected from the group consisting of an inducible promoter, a constitutive promoter, and a tissue specific promoter.

7. The nucleic acid of claim 5, wherein said promoter is active in eukaryotic cells.

8. The nucleic acid of claim 5, further comprising a selectable marker.

9. The nucleic acid of claim 5, further comprising a poly-adenylation signal.

10. The nucleic acid of claim 5, further comprising an origin of replication.

11. The nucleic acid of claim 10, wherein said nucleic acid is part of a replicable vector.

12. The nucleic acid of claim 11, wherein said vector is a viral vector.

13. The nucleic acid of claim 12, wherein said viral vector is selected from the group consisting of a retroviral vector, an adenoviral vector, an adeno-associated viral vector, a herpes viral vector, a polyoma viral vector, a vaccinia viral vector and a lentiviral vector.

14. The nucleic acid of claim 12, wherein said viral vector is located within a viral particle.

15. The nucleic acid of claim 10, wherein said vector is a non-viral vector.

16. An oligonucleotide of about 10 to about 50 bases comprising at least 10 consecutive bases of SEQ ID NO:1 or SEQ ID NO:3, or the complement thereof.

17. The oligonucleotide of claim 16, wherein said oligonucleotide is 10, 15, 20, 25, 30, 35, 40, 45 or 50 bases in length.

18. The oligonucleotide of claim 16, wherein the number of said consecutive bases is 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49 or 50.

19. The oligonucleotide of claim 16, wherein the oligonucleotide encodes or is complementary to a splice junction of SEQ ID NO:3.

20. The oligonucleotide of claim 16, wherein the oligonucleotide encodes or is complementary to a regulatory region of SEQ ID NO:3.

21. The oligonucleotide of claim 16, wherein said oligonucleotide encodes or is complementary to bases 224, 814, 823, 387, 1413, 940 or 1206 of SEQ ID NO:1.

22. An isolated and purified human NGVN polypeptide.

23. The polypeptide of claim 22, wherein said polypeptide comprises the sequence of SEQ ID NO:2.

24. The polypeptide of claim 22, wherein said polypeptide comprises the sequence of SEQ ID NO:2, except for one or more of the changes selected from the group consisting of Val_{75}→Gly, Arg_{272}→Stop, Arg_{275}→Stop, and Ile_{123}→Val.

25. The polypeptide of claim 22, wherein said polypeptide comprises the sequence of SEQ ID NO:2 from residues 1-313 or 1-401.

26. The polypeptide of claim 22, wherein said NGVN polypeptide is fused to a non-NGVN polypeptide.

27. A method of expressing a NGVN polypeptide comprising transforming a host cell with an expression construct encoding a NGVN polypeptide and culturing said host cell under conditions supporting expression of said NGVN polypeptide.

28. The method of claim 27, wherein said host cell is a prokaryotic cell.

29. The method of claim 27, wherein said host cell is a eukaryotic cell.

30. The method of claim 27, further comprising purifying said NGVN polypeptide.

31. The method of claim 27, wherein said expression construct comprises an inducible promoter, and said method further comprises providing to said host cell and inducer of said promoter.

32. A peptide of 8 to 50 residues comprising at least 5 consecutive residues of SEQ ID NO:2.

33. The peptide of claim 32, wherein said peptide is 10, 15, 20, 25, 30, 35, 40, 45 or 50 residues in length.

34. The peptide of claim 32, wherein the number of said consecutive residues is 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49 or 50.

35. The peptide of claim 32, wherein said peptide is bound to a carrier molecule.

36. The peptide of claim 35, wherein said peptide is bound to said carrier molecule by a linker.

37. A monoclonal antibody that binds immunologically to a polypeptide comprising the sequence of SEQ ID NO:2.

38. The antibody of claim 37, wherein said antibody is bound to a support.

39. A hybdridoma cells that produces a monoclonal antibody that binds immunologically to a polypeptide comprising the sequence of SEQ ID NO:2.

40. A polyclonal antiserum, antibodies of which bind immunologically to a polypeptide comprising the sequence of SEQ ID NO:2

41. The antiserum of claim 40, wherein antibodies of said antiserum are bound to a support.

42. A method of diagnosing Bardet-Biedl Syndrome (BBS) comprising identifying a mutation in a NGVN polypeptide or nucleic acid.

43. The method of claim 42, wherein said method comprises identifying a mutation in a NGVN polypeptide.

44. The method of claim 43, wherein said method comprises immunologic analysis using a NGVN-binding monoclonal antibody or polyclonal antiserum.

45. The method of claim 44, wherein said immunologic analysis comprises ELISA, RIA, or Western blot.

46. The method of claim 43, wherein said method comprises identifying a mutation selected from the group consisting of $Val_{75}\rightarrow Gly$, $Arg_{272}\rightarrow Stop$, $Arg_{275}\rightarrow Stop$, and $Ile_{123}\rightarrow Val$.

47. The method of claim 42, wherein said method comprises identifying a mutation in a NGVN nucleic acid.

48. The method of claim 47, wherein said nucleic acid is a NGVN mRNA.

49. The method of claim 47, wherein said nucleic acid is a NGVN genomic DNA.

50. The method of claim 47, wherein said method comprises amplification of said nucleic acid.

51. The method of claim 47, wherein said method comprises hybridization of said nucleic acid to a labeled nucleic acid probe.

52. The method of claim 47, wherein said method comprises sequencing of a NGVN nucleic acid.

53. The method of claim 47, wherein said method comprises identifying a mutation selected from the group consisting of $T_{224}\rightarrow G$, $C_{814}\rightarrow T$, $C_{823}\rightarrow T$, $A_{387}\rightarrow G$, $A_{1413}\rightarrow C$, A_{940}del and 1206insA.

54. A method of identifying an individual genetically predisposed to obesity comprising identifying a mutation in a NGVN polypeptide or nucleic acid.

55. A method of identifying an individual genetically predisposed to diabetes mellitus comprising identifying a mutation in a NGVN polypeptide or nucleic acid.

56. A method of identifying an individual genetically predisposed to renal defects comprising identifying a mutation in a NGVN polypeptide or nucleic acid.

57. A method of identifying an individual genetically predisposed to retinopathy comprising identifying a mutation in a NGVN polypeptide or nucleic acid.

58. A method of identifying an individual genetically predisposed to hypertension comprising identifying a mutation in a NGVN polypeptide or nucleic acid.

59. A method of identifying an individual genetically predisposed to congenital heart disease comprising identifying a mutation in a NGVN polypeptide or nucleic acid.

60. A method of identifying an individual genetically predisposed to limb deformities comprising identifying a mutation in a NGVN polypeptide or nucleic acid.

61. A method of identifying an individual genetically predisposed to renal cell carcinoma comprising identifying a mutation in a NGVN polypeptide or nucleic acid.

62. A method of identifying an individual genetically predisposed to renal malformation comprising identifying a mutation in a NGVN polypeptide or nucleic acid.

63. A method of screening for a modulator of NGVN expression comprising:

(a) providing a cell expressing a NGVN polypeptide;

(b) contacting said cell with a candidate modulator;

(c) measuring NGVN expression; and

(d) comparing said NGVN expression in the presence of said candidate modulator with the expression of NGVN in the absence of said candidate modulator;

wherein a difference in the expression of NGVN in the presence of said candidate modulator, as compared with the expression of NGVN in the absence of said candidate modulator, identifies said candidate modulator as a modulator of NGVN expression.

64. A method of screening for a modulator of NGVN expression comprising:

(a) providing a cell that comprises an expression construct encoding an indicator polypeptide under the control of a NGVN polypeptide;

(b) contacting said cell with a candidate modulator;

(c) measuring expression of said indicator polypeptide; and

(d) comparing said expression of said indicator polypeptide in the presence of said candidate modulator with the expression of said indicator polypeptide in the absence of said candidate modulator;

wherein a difference in the expression of said indicator polypeptide in the presence of said candidate modulator, as compared with the expression of said indicator polypeptide in the absence of said candidate modulator, identifies said candidate modulator as a modulator of NGVN expression.

65. A method of producing a modulator of NGVN expression comprising:

(a) providing a cell expressing a NGVN polypeptide;

(b) contacting said cell with a candidate modulator;

(c) measuring NGVN expression;

(d) comparing said NGVN expression in the presence of said candidate modulator with the expression of NGVN in the absence of said candidate modulator; wherein a difference in the expression of NGVN in the presence of said candidate modulator, as compared with the expression of NGVN in the absence of said candidate modulator, identifies said candidate modulator as a modulator of NGVN expression; and

(e) producing the modulator.

66. A modulator of NGVN expression produced according to the method comprising:

(a) providing a cell expressing a NGVN polypeptide;

(b) contacting said cell with a candidate modulator;

(c) measuring NGVN expression;

(d) comparing said NGVN expression in the presence of said candidate modulator with the expression of NGVN in the absence of said candidate

modulator; wherein a difference in the expression of NGVN in the presence of said candidate modulator, as compared with the expression of NGVN in the absence of said candidate modulator, identifies said candidate modulator as a modulator of NGVN expression; and

(e) producing the modulator.

67. A human NGVN promoter isolatable from SEQ ID NO:3.